## CENTRAL PHILIPPINE UNIVERSITY, ILCILO CITY

The Teaching of Mathematics in Thailand Schools



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#### AN ABSTRACT OF A THESIS

### THE TEACHING OF MATHEMATICS IN THAILAND SCHOOLS

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The Kingdom of Thailand, commonly called by Thai nationals "Prathest Thai", or "Land of the Free", is situated in South-East Asia. It will have population of 31,000,000 this present year. The length of the country from north to south is approximately 1,020 miles. Officially, Thailand is divided into 71 provinces or "Changwad" and geographically it may be divided into five main parts, viz., Northern, Central, North-Eastern, Easterwand Southern.

There are three main seasons: dry, rainy, and cool. As a tropical country, its temperature ranges from fifty-four to one hundred two degrees Fahrenheit.

The national religion of Thailand is Buddhism which was founded in India about the sixth century before the Christian era. There are about 34,000 Buddhist monasteries throughout the kingdom with a monastic population of about 250,000.

The agriculture of Thailand may be treated under three major headings, namely: rice cultivation, upland

crops, and trees, and livestock production. About eighty-six per cent of the agriculturists or about seventy-two per cent of the total population own their farms. Aice, which is the main crop and the mainstay of the economy of Thailand, accounts for sixty-six per cent of her total export.

In foreign relations, the kings of Thailand are known to have granted land to foreign missions to build their churches. In recent times Christian missionaries have been permitted to set up schools and hospitals. Foreigners are welcomed with a friendly smile throughout the land.

In 1960, a new national scheme of education was launched providing for an extension of free and compulsory education from four to seven years so that the standard of education of the people might be raised. The primary extension school was built into the new structure and became known as the Senior Primary school. This coincides with the "Karachi Plan" which proposed in 1960 the objective of free and compulsory education of at least seven years' duration for all countries.

In order to accomplish this study, the following sources were used:

1. Educational directives and documents of the Department of Public Instruction of Thailand.

- 2. Reports of the curriculum committee for secondary education.
- 3. The syllabus in mathematics as prepared by the Board of Education, Bangkok, Thailand.
  - 4. Books in the field of the teaching of mathematics.
  - 5. Educational research journals.
- 6. Questionnaires on the present status of teaching mathematics, sent to mathematics teachers in twenty-five districts in Thailand.

A total of 350 questionnaires were sent with instructions to the district inspectors of schools to sample the city, town, and village schools at the primary and secondary school levels. Twenty-two districts returned the questionnaires with 298 teachers answering them or 35 per cent of the total sent.

The questionnaires were sent with the hope that the teachers to whom they were sent would truly be representatives of the population. Since there were no control of the distribution of the questionnaires in the various districts, it was difficult to guarantee that the samples would be scientifically representative of the population. In order to check the validity of the sampling used, the rank order correlation coefficient was used for such items as "subject matter taught other than mathematics" and "activities participated in by the mathematics teachers."

Since twenty-five districts were included in the sampling and twenty-two of these responded; since after tabulating the 298 questionnaires received no appreciable changes in the trends were found; and since the correlation between different items were nigh and significant at 1 per cent level of confidence, it was concluded that the sampling was valid and representative of the population used.

The study revealed that teachers with a secondary teacher's training certificate with more years of experience and with the bachelor's degree teach in the secondary schools, and those with lower qualifications and with less years of experience teach in the primary schools.

The most commonsteaching materials used by teachers in the secondary and primary grades are textbooks, black-boards, charts, and pictures.

Lectures, dictating notes, supervised study, writing in notebooks by the pupils are the most common methods used by all the mathematics teachers.

Supervision and evaluation of teachers is done by the headmasters once a month and by district inspectors of schools once a year.

Conferences and seminars are the two most common activities participated in by teachers at all levels. However, only forty-two teachers of the 298 or 14 per cent

attended conferences and twenty-one or 7 per cent attended seminars.

Essay examinations is the type of test used by all the teachers at both levels. No one used objective tests.

All teachers at the two levels enjoy teaching mathematics and believe that mathematics develops citizen-ship, judgment, imagination, love of truth, appreciation of cultural values, and skill in handling effective thinking.

On the basis of findings in the study, the following recommendations are suggested:

- 1. That the number of subject preparations of teachers in the secondary and primary grades be limited to those subjects closely related to mathematics, such as science. This will enable those teachers who have lower academic qualifications to have more time to prepare their lessons.
- 2. That the facilities of schools and colleges in the capital city be utilized during summer vacations for teacher-training classes.
- 3. That a more adequate and scientific arrangement of supervision be provided for teachers, especially for those with less qualifications and with less years of experience.
- 4. That more in-service education activities be provided for the teachers to promote continuous profes-

sional growth.

- 5. That district inspectors of schools and headmasters plan jointly for local in-service activities for teachers.
- o. That salaries of teachers of equal training, irrespective of the level where they are teaching, be the same, so as to attract and hold better qualified teachers in the lower grades.
- 7. That teachers' meetings and conferences for the specific purpose of promoting the development of good study should be provided in the school program. In these meetings and conferences teachers should be made to realize that their most important function is to encourage and to help students to study effectively, to aid them in securing confidence and faith in themselves, and to provide a strong motive for right planning for their lives. Hence, the students should be trained directly in the proper use of mental processes that underlie effective thinking and studying.
- 8. That the great value of friendly conferences between teachers and students should be recognized. These
  should have a place as much as possible in the teachers'
  individual program of activities. These conferences should
  be held regularly and confucted not as disciplinary measures,
  but as a means of motivating the study and learning activ-

ities of students.

9. That utilization of class contests deserves the administrators' and teachers' consideration as a means of motivation. Unless pupils have favorable attitudes toward their work and genuine interest in the activities which are involved in study, even the most skillful direction will fail.

These contests may be conducted within the class or among classes. Teachers, however, should exercise great care that friendly rivalry permeate these contests and that they are chiefly directed to stimulate students to study more.